LISTING OF CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

Claims 1-2 (Canceled)

3. (Currently Amended): A monitor apparatus for a sequential-function-chart-type programmable controller, comprising:

a reference-active-time memory unit ~~for storing~~ configured to store a standard value of an active time of an arbitrary step in a sequential-function-chart program;

a timer ~~for measuring the~~ configured to measure actual active time of the arbitrary step;

an anomalous-state monitoring unit ~~which detects~~ configured to detect an anomalous state of the arbitrary step through a comparison between the active time measured by the timer and the standard value stored in the reference-active-time memory unit;

a display unit ~~for displaying~~ configured to display the sequential-function-chart program steps in such a manner that a step which has been detected by the anomalous-state monitoring unit to be in an anomalous state is distinguished from other displayed steps; and

an execution monitor unit ~~for storing~~ configured to store data indicating whether or not each step in the sequential-function-chart program has been executed, wherein the display unit ~~displays~~ is further configured to display the sequential-function-chart program steps in such a manner that ~~a~~ any step or steps which have been executed are distinguished from ~~a~~ any step or steps which have not yet been executed, on the basis of the data stored in the execution monitor unit so as to indicate a history or path up to the step detected to be in an anomalous state, wherein the history or path up to the step detected to be in an anomalous state is reset by

eliminating data indicating executed steps from the data stored in the execution monitor unit ~~only~~ during an initial step of the sequential-function-chart program.

Claim 4 (Currently Amended): A monitor apparatus for a sequential-function-chart-type programmable controller according to Claim 3, wherein when conditions for transition from a certain step to the next step are satisfied, the execution monitor unit ~~brings~~ is configured to bring a corresponding execution-completion flag into a predetermined state to thereby store data indicating that ~~memorize whether~~ the certain step has been executed.

Claims 5-6 (Canceled).

Claim 7 (Currently Amended): A monitor apparatus for a sequential-function-chart-type programmable controller, comprising:

a reference-active-time memory unit ~~for storing~~ configured to store a standard value of an active time of an arbitrary step in a sequential-function-chart program;

a timer ~~for measuring the~~ configured to measure actual active time of the arbitrary step;

an anomalous-state monitoring unit ~~which detects~~ configured to detect an anomalous state of the arbitrary step through a comparison between the active time measured by the timer and the standard value stored in the reference-active-time memory unit;

an execution monitor unit ~~for storing~~ configured to store data indicating whether or not each step in the sequential-function-chart program has been executed; and

a display unit ~~for displaying~~ configured to display the program in such a manner that a step detected by the anomalous-state monitoring unit to be in an anomalous state, a step or

steps which have been executed, and a step or steps which have not yet been executed are distinguished from one another so as to indicate a history or path up to the step detected to be in an anomalous state, wherein the history or path up to the step detected to be in an anomalous state is ~~only~~ reset by eliminating all data indicating executed steps from the data stored in the execution monitor unit during an initial step of the sequential-function-chart program.

Claim 8 (Currently Amended): A monitor apparatus for a sequential-function-chart-type programmable controller according to Claim 7, wherein when conditions for transition from a certain step to the next step are satisfied, the execution monitor unit ~~brings~~ is configured to bring a corresponding execution-completion flag into a predetermined state to thereby store data indicating that ~~memorize whether~~ the certain step has been executed.